

AMENDMENT TO THE CLAIMS

1. (Canceled)

2. (Previously Presented) An image forming apparatus comprising:

scanning means for scanning a photosensitive body using a plurality of

semiconductor lasers to form a latent image; and

latent image forming means for pulse-width-modulating a drive signal of the

semiconductor lasers in accordance with a write position of the latent image in the case that

exposure is performed such that one beam from the plurality of semiconductor lasers is

partially overlapped with an adjacent beam from the plurality of semiconductor lasers on

the photosensitive body,

wherein said latent image forming means does not pulse-width-modulate the

drive signal in the case that at least two of the plurality of semiconductor lasers are

simultaneously turned on in one scanning, and

wherein the latent image forming means pulse-width-modulates the drive

signal in the case that one beam from the plurality of semiconductor lasers which is turned

on in one scanning is adjacent to one beam from the plurality of semiconductor lasers

which is turned on in the next scanning.

3. (Previously Presented) An image forming apparatus comprising:

scanning means for scanning a photosensitive body using a plurality of

semiconductor lasers to form a latent image; and

latent image forming means for pulse-width-modulating a drive signal of the semiconductor lasers in accordance with a write position of the latent image in the case that exposure is performed such that one beam from the plurality of semiconductor lasers is partially overlapped with an adjacent beam from the plurality of semiconductor lasers on the photosensitive body,

wherein said latent image forming means does not pulse-width-modulate the drive signal in the case that at least two of the plurality of semiconductor lasers are simultaneously turned on in one scanning, and


wherein said latent image forming means pulse-width-modulates the drive signal in the case that one of the plurality of semiconductor lasers is turned on in one scanning.

4. (Canceled)

5. (Previously Presented) An image forming method for scanning a photosensitive body using a plurality of semiconductor lasers to form a latent image, comprising the step of:

forming a latent image by modulating a drive signal of the semiconductor lasers by PWM in accordance with a write position of the latent image in the case that exposure is performed such that one beam from the plurality of semiconductor lasers is partially overlapped with an adjacent beam from the plurality of semiconductor lasers on the photosensitive body,

wherein, in said latent image forming step, the drive signal is not modulated by PWM in the case that at least two of the plurality of semiconductor lasers are simultaneously turned on in one scanning, but is modulated by PWM in the case that one beam from the plurality of semiconductor lasers which is turned on in one scanning is adjacent to one beam from the plurality of semiconductor lasers which is turned on in a next scanning.



6. (Previously Presented) An image forming method for scanning a photosensitive body using a plurality of semiconductor lasers to form a latent image, comprising the step of:

forming a latent image by modulating a drive signal of the semiconductor lasers by PWM in accordance with a write position of the latent image in the case that exposure is performed such that one beam from the plurality of semiconductor lasers is partially overlapped with an adjacent beam from the plurality of semiconductor lasers on the photosensitive body,

wherein, in said latent image forming step, the drive signal is not modulated by PWM in the case that at least two of the plurality of semiconductor lasers are simultaneously turned on in one scanning, but is modulated by PWM in the case that one of the plurality of semiconductor lasers is turned on in one scanning.

7. (Currently Amended) An image forming apparatus comprising:

a plurality of emitting means for emitting a plurality of light beams;

scanning means for scanning the plurality of light beams emitted from said plurality of emitting means on a common photosensitive body;

modulating means for ~~pulse-width~~ modulating the plurality of light beams emitted from said plurality of emitting means in accordance with respective image data;

~~detecting means for detecting a plurality of image pixels which are adjacent to each other in a sub-scanning direction and which are exposed in different main~~

~~scannings, in accordance with the image data; and~~

pulse-width control means for controlling said modulating means such that a pulse width for a an image pixel detected by said detecting means, to which another image pixel adjacent in a sub-scanning direction exists and is exposed in a different main scanning, is shorter than a pulse width for ~~a pixel which is not detected by said detecting means~~ the other image pixel.

8 to 10. (Canceled)

11. (Currently Amended) An image forming apparatus according to claim 7, wherein said pulse-width control means controls said modulating means such that the pulse width for the image pixel detected by said detecting means is shorter than 100% and the pulse width for the other image pixel is 100%.

12. (Currently Amended) An image forming apparatus according to claim 7, ~~wherein said detecting means comprises~~ further comprising storage means for storing image data of at least one main scanning.

13. (Currently Amended) An image forming apparatus according to claim 7, wherein exposure is performed such that adjacent image pixels are partially overlapped with each other.

14. (Currently Amended) An image forming apparatus according to claim 7, wherein the light ~~beam is a~~ beams are laser beams beam.

15. (Currently Amended) An image forming apparatus comprising:
a plurality of emitting means for emitting a plurality of light beams;
scanning means for scanning the plurality of light beams emitted from said plurality of emitting means on a common photosensitive body;

modulating means for ~~pulse-width~~ modulating the plurality of light beams emitted from said plurality of emitting means in accordance with respective image data;

~~detecting means for detecting a plurality of image pixels which are adjacent to each other in a sub-scanning direction and which are exposed in common main~~
~~scannings, in accordance with the image data; and~~

pulse-width control means for controlling said modulating means such that a pulse width for a an image pixel detected by said detecting means, to which another image

pixel adjacent in a sub-scanning direction exists and is exposed in a common main scanning, is longer than a pulse width for ~~a pixel which is not detected by said detecting means~~ the other image pixel.

16 to 18. (Canceled)

19. (Currently Amended) An image forming apparatus according to claim 15, wherein said pulse-width control means controls said modulating means such that the pulse width for the image pixel ~~which is detected by said detecting means~~ is 100% and the pulse width for the other image pixel ~~which is not detected by said detecting means~~ is shorter than 100%.

20. (Currently Amended) An image forming apparatus according to claim 15, ~~wherein said detecting means comprises~~ further comprising storage means for storing image data of at least one main scanning.

21. (Currently Amended) An image forming apparatus according to claim 15, wherein exposure is performed such that adjacent image pixels are partially overlapped with each other.

22. (Currently Amended) An image forming apparatus according to claim 15, wherein the light beams are ~~beam is a laser~~ beams beam.

23. (Currently Amended) An image forming method comprising:

an emitting step of emitting a plurality of light beams;

a scanning step of scanning the plurality of light beams to be emitted on a common photosensitive body;

a modulating step of ~~pulse-width~~ modulating the plurality of light beams emitted in said emitting step in accordance with respective image data;

a detecting step of detecting a plurality of image pixels which are adjacent to each other in a sub-scanning direction and which are exposed in different main scanings, in accordance with the image data; and

a pulse-width control step of controlling the modulation in said modulating step such that a pulse width for a pixel detected in said detecting step is shorter than a pulse width for a pixel which is not detected in said detecting step.

24. (Currently Amended) An image forming method comprising:

an emitting step of emitting a plurality of light beams;

a scanning step of scanning the plurality of light beams to be emitted on a common photosensitive body;

a modulating step of ~~pulse-width~~ modulating the plurality of light beams emitted in said emitting step in accordance with respective image data;

a detecting step of detecting a plurality of image pixels which are adjacent to each other in a sub-scanning direction and which are exposed in common main scanings, in accordance with the image data; and

a pulse-width control step of controlling the modulation in said modulating step such that a pulse width for a pixel detected by in said detecting step is longer than a pulse width for a pixel which is not detected in said detecting step.

25. (Currently Amended) An image forming apparatus comprising:
a plurality of emitting means for emitting a plurality of light beams;
scanning means for scanning a common photosensitive body with the plurality of light beams emitted by said plurality of emitting means;
modulating means for modulating the plurality of light beams in accordance with respective image data; and
control means for variably controlling an exposure amount of the plurality of light beams, in a case that image pixels, each of which is ~~overlapped with~~ adjacent to another image pixel in a sub-scanning direction, are exposed in ~~a common scanning~~ different scanings such that an exposure amount to expose at least one of the image pixels relatively ~~increases~~ decreases compared to a case that the image pixels are exposed in a ~~different scanings~~ common scanning.

26. (Previously Presented) An image forming apparatus according to Claim 25, wherein said control means performs pulse-width modulation.

27. (Previously Presented) An image forming apparatus according to Claim 25, comprising memory means for storing image data for at least one scanning.

28. (Previously Presented) An image forming apparatus according to Claim 25, wherein the light beams are laser beams.

29. (Currently Amended) An image forming method comprising:

a step of emitting a plurality of light beams;

a step of scanning a common photosensitive body with the plurality of light

beams emitted in said emitting step;

a step of modulating the plurality of light beams in accordance with

respective image data; and

a step of variably controlling an exposure amount of the light beams, in ~~the~~
a case that image pixels, each of which is overlapped with adjacent to another image pixel
in a sub-scanning direction, are exposed in ~~a common scanning~~ different scanings such
that an exposure amount to expose at least one of the image pixels relatively ~~increases~~
decreases compared to a case that the image pixels are exposed in ~~different scanings~~ a
common scanning.
